RRRRRRRRRRR	MMM MMM	SSSSSSSSSS
RRRRRRRRRRR	MMM MMM	SSSSSSSSSS
RRRRRRRRRRR	MMM MMM	SSSSSSSSSS
RRR RRR	MMMMMM MMMMMM	SSS
RRR RRR	MMMMMM MMMMMM	SSS
RRR RRR	ммммм мммммм	SSS
RRR RRR	MMM MMM MMM	SSS
RRR RRR	MMM MMM MMM	SSS
• • • • • • • • • • • • • • • • • • • •		SSS
	MMM MMM MMM	
RRRRRRRRRRR	MMM MMM	SSSSSSSS
RRRRRRRRRRR	MMM MMM	SSSSSSSS
RRRRRRRRRRR	MMM MMM	SSSSSSSS
RRR RRR	MMM MMM	SSS
RRR RRR	MMM MMM	SSS
RRR RRR	MMM MMM	ŠSS
RRR RRR	MMM MMM	ŠŠŠ
RRR RRR	MMM MMM	SSS
RRR RRR	MMM MMM	ŠŠŠ
RRR RRR	MMM MMM	SSSSSSSSSSS
• • • • • • • • • • • • • • • • • • • •		\$\$\$\$\$\$\$\$\$\$\$\$\$
RRR RRR	MMM MMM	\$\$\$\$\$\$\$\$\$\$\$\$

\_\$;

NT!
NT!
NT!
NT!
NT!
NT!
NT!

NT!

NT: NT: NT: NT: NT: NT

NT NT NT NT NT PI

RRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRR	MM MM MMM MMMM MMMM MMMM MMM MM MM MM MM	000000 000000 00 00 00 0000 00 00 00 00 00	000000 00	MM MM MMM MMM MMMM MMMM MMMM MM MM MM MM		NN
		\$				

. . . .

B 2 RMOCOMCLN Table of contents COMMON CLEAN UP CONN-DISCONN 16-SEP-1984 00:14:09 VAX/VMS Macro V04-00 Page (2) (3) 71 105 DECLARATIONS RM\$DISCOMMON - COMMON CLEANUP ON CONNECT-DISCONNECTT ROUTINES

RM Sy

11 12

14

16

18

19

20122334556

40

41

56 57

0000 0000 0000

0000

0000 0000

0000 0000

0000

0000

0000 0000

0000

0000

0000

0000

0000

0000 0000

0000

0000

0000

0000

0000

0000

0000

0000

0000 0000

0000

0000 0000

0000

0000

0000

0000 0000

0000 0000

0000

0000

0000

0000

0000 0000

0000

0000

0000

RM

Ps

PS

RM

SA

Ph

In

Co

Pa

Sy

Sy

Cr

As

Th

65

Th

31

-\$ -\$ TO

13

Th

MA

```
SBEGIN RMOCOMCLN,000,RMSRMSO,<COMMON CLEAN UP CONN-DISCONN>
```

COPYRIGHT (c) 1978, 1980, 1982, 1984 BY DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS. ALL RIGHTS RESERVED.

C 2

THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY TRANSFERRED.

THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT CORPORATION.

DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.

: Facility: rms32

Abstract:

this module provides four entry points to provide common clean up on connect - disconnect.

Environment:

star processor running starlet exec.

Creation Date: 31-MAR-1977 Author: L f Laverdure.

Modified By:

29-Feb-1984 V03-008 JWT0160 Jim Teague Complete the anticipated removal of RM\$DEALLEFN.

SHZ0001 Stephen H. Zalewski 3-feb-1983 Make routine RM\$DEALLEFN a NOP in anticipation of 3-feb-1983 removing it altogether.

29-Apr-1983 V03-006 KPL0008 Peter Lieberwirth Always deallocate IRAB journaling structures.

V03-005 KBT0367 11-0ct-1982 Keith B. Thompson Deallocate irab and asb seperatly

Jeffrey W. Horn 20-Sep-1982 V03-004 JWH0002 Rename RLB\$W\_OWNER to RLB\$L\_OWNER.

V03-003 KB10322 9-Sep-1982 Keith B. Thompson

33 34 35 36 37 38 39

0000 0000 0000 0000

RMOCOMCLN V04-000	COMMON CLEAN	UP CONN-D	ISCONN	D 2 16-SEP-1984 00:14:09 VAX/VMS Macro V04-00 Page 2 5-SEP-1984 16:21:29 [RMS.SRC]RMOCOMCLN.MAR;1 (1)
	0000	58 : 59 :		Remove all SO sharing code
	0000 0000	60 : 61 : 62 : 63 :	v03-002	KBT0202 Keith B. Thompson 23-Aug-1982 Reorganize psects and fix rev. history of jwh0001
	0000 0000 0000 0000 0000 0000 0000 0000	63 64 65 66 67 68 69	v03-001	JWH0001 Jeffrey W. Horn 19-May-1982 Add call to RM\$DSCJNL to get rid of journaling BDB and buffer.

; global buffer pointer block

Ta

```
0000
0000
0000
          7777777888888888899999999999911003
                             .SBTTL DECLARATIONS
                Include Files:
Macros:
                            $BLBDEF
$GBPBDEF
                            $IFBDEF
$DEVDEF
                            $IRBDEF
                            SCSHDEF
                            $RLSDEF
                            SRLBDEF
SFABDEF
SRABDEF
                            $PIODEF
$IMPDEF
                            $PSLDEF
                            $RMSDEF
                Equated Symbols:
```

Own Storage:

E 2

Page

(3)

r

```
RMSDISCOMMON - COMMON CLEANUP ON CONNECT 5-SEP-1984 16:21:29
                                                                     [RMS.SRC]RMOCOMCLN.MAR:1
                          .SBTTL RMSDISCOMMON - COMMON CLEANUP ON CONNECT-DISCONNECTT ROUTINES
     0000
             106
     0000
             107
     0000
             108
                   RM$DISCOMMON
     0000
             109
     0000
             110
     0000
             111
                          RM$DISCOMMONSUC - sets r0 to rm$ suc and falls thru to rm$discommon
     0000
             112
                          RM$DISCOMMON
                                            - checks for network disconnect and falls thru to
             113
     0000
                                              rm$comclnup
     0000
             114
                          RM$COMCLNUP
                                            - return all bdb's and buffers for stream and fall thru
     0000
             115
                                              to rm$ccln1 r0 already pushed onto stack
     0000
             116
                          RMSCCLN1
                                            - deallocate irab and zero isi and irab table entry
     0000
             117
             118
     0000
                   Calling sequence:
     0000
             119
     0000
             120
                                   rm$discommonsuc
                          bsbw
     0000
             121
                          bsbw
                                   rm$discommon
             122
     0000
                          brw
                                   rm$comclnup
     0000
                          bsbw
                                   rm$ccin1
             124
     0000
             125
126
127
     0000
                    Input Parameters:
     0000
     0000
                          r11
                                   impure area address
             128
     0000
                          r10
                                   ifab address
             129
     0000
                          r9
                                   irab address
     0000
                          r8
                                   rab address
     0000
             131
                          r0
                                   status code (except for entry at rm$discommonsuc)
            132
     0000
     0000
                    Implicit Inputs:
     0000
             134
                                                    irb$v_pap_conn
irb$b_bcnt & bdb chain
     0000
             135
                      for entry at rm$discommon:
     0000
             136
                      for entry at rm$comclnup:
     0000
             137
                      for entry at rm$ccln1:
                                                     irb$l_irab_lnk
     0000
             138
     0000
             139
                   Output Parameters:
     0000
             140
     0000
             141
                                   status code
                          r0
             142
     0000
                          r7
                                   set from irb$b_mode
     0000
             143
                          r9
                                   zeroed
     0000
             144
                                   set from irb$l_arglst
     0000
             145
                          r1-r6
                                   destroyed
     0000
             146
     0000
             147
                    Implicit Outputs:
     0000
             148
                          rab$w_isi zeroed
rab$l_stv possibly updated
irab, its bcb's, bdb's and related buffers deallocated
     0000
             149
     0000
             150
     0000
             151
             152
153
     0000
     0000
                    Completion Codes:
     0000
             154
```

standard rms. if an error occurs it will replace

in rO will be used.

Side Effects:

none

the status code input in r0, otherwise the code input

16-SEP-1984 00:14:09

VAX/VMS Macro V04-00

F

COMMON CLEAN UP CONN-DISCONN

161:

RM V(

0000 162 :--163

(5)

33 08 2A

6A

003B 003E

003F

ĖÕ

```
165
166
167
                      ŎŎĞŎ
                      ŎŎŎŎ
                                    ; entry point to set r0 = rm$_suc and fall thru into rm$discommon
                               169
                               170
                               171
                                    RM$DISCOMMONSUC::
                               172
                               173
                                              RMSSUC
                               174
                               175 ;++
                               176
                                      entry point to check for network disconnect and fll thru into rm$comclnup
                               178
                               179
                      0003
                      0003
                      0003
                                    RM$DISCOMMON::
                               182
           50
                 DD
                      0003
                                              PUSHL
                                                                                       ; save status
                      0005
                               184
                      0005
                               185
                      0005
                                              check for process-permanent file cleanup
                      0005
                               186
                               187
                      0005
           22
03
     69
                      0005
                               188
                 E1
                                              BBC
                                                        #IRB$V_PPF_IMAGE,(R9),-
                               189
                      8000
                                                         15
                                                                                         branch if not indirect acc to ppf
                 31
E1
                      0009
                               190
                                              BRW
                                                        IND_FILE
                                                                                         branch
                                                        #IFB$V_PPF_INPUT, (R10),-
                      0000
                               191 15:
                                              BBC
     6A
                               192
193
                      000F
                                                        10$
                                                                                       : branch if not sys$input
                 B0
                                                        #1+<^A/$/a8>,-
     2401
                      0010
                                              MOVW
                                                        a#PIOSGT_ENDSTR
#1aPIOSV_EOD -
a#PIOSGW_STATUS
00000000 9F
                               194
                      0014
                                                                                       ; reset eod string to '$'
                               195
                 A8
                      0019
                                              BICB2
00000000 '9F
                      001B
                                                                                       ; and clear eod flag
                               197 105:
                      0020
           3C
0D
    69
                 E 5
                      0020
                               198
                                              BBCC
                                                        #IRB$V_DAP_CONN,(R9),-
                               199
200
201 :++
202:
203: perfo
204:
205:--
206 NTDISC:
208
209
210
211
212
213
214 BIOCHK:
215
216
217
218
219
220
221
                               199
                      0023
                                                        BIOCHK'
                                                                                       : not net then continue
                                        perform network disconnect function
                                              BBS
     6B
           04
                                                        #IMPSV_IORUNDOWN, (R11),-
                 E 0
           09
                                                        BIOCHK'
                                                                                         branch if i/o rundown in progress
        FFD5
                 30
                                                        NT$DISCONNECT
                                              BSBW
                                                                                         disconnect at remote node
                      002B
002E
           50
50
                 É8
                                              BLBS
                                                        RO, BIOCHK
                                                                                       ; branch if successful
                 ĎŎ
                                                        RO.(SP)
                                              MOVL
                                                                                       ; save error code
                                                        #IFB$V_BIO,-
IFB$B_FAC(R10),NOBUFF
IFB$B_ORGCASE(R10)
RM$COMCLNUP
                      0031
                                              BBS
                 E 0
                      0033
           AA
                                                                                         branch if block i/o
                      0036
0039
                 95
13
           AA
                                                                                       ; is this seq f.o.?
                                              TSTB
                                              BEQL
                                                                                       ; if yes, no lock bdb to return
```

#IFB\$V\_NORECLK,(R10),-RM\$COMCLNUP

RTNBLB

; branch if no locking

; return the lock blb.

BBS

BRB

Page

(5)

```
COMMON CLEAN UP CONN-DISCONN 16-SEP-1984 00:14:09 VAX/VMS Macro V04-00 RM$DISCOMMON - COMMON CLEANUP ON CONNECT 5-SEP-1984 16:21:29 [RMS.SRC]RMOCOMCLN.MAR;1
                                                          NOBUFF:
                                          0041
                                          0041
                                          0041
                                                                         This is the return the block i/o bdb. This will branch into cache
                                          0041
                                                                         and release to get rid of it. Because the bdb was not counted as
                                                                        a buffer when allocated, the avicl count is bumped so cache will just find it and take it. Cache will also set the bdb$w_users count to 1 so that release is not upset for the relative and isam orgs.
                                          0041
                                          0041
                                          0041
                                          0041
                                                                         The only reason cache and release are used at all is because if
                                          0041
                                                                         someone is out there doing asynch multistreaming with block i/o,
                                          0041
                                                                         this should prevent us from returning a bdb in use, because cache
                                                                         will look for one with a users count of 0, and the block i/o code
                                          0041
                                          0041
                                                                         sets the users count to 1 when using it.
                                          0041
                                          0041
         0084 CA
                                B6
                                          0041
                                                                                       INCW
                                                                                                          IFB$W_AVLCL(R10)
                                                                                                                                                                  ; want to fake out cache so it
                                                                                                                                                                  ; doesn't try to free one.
                                          0045
                                 11
                     05
                                          0045
                                                                                       BRB
                                                                                                          BIO
                                                                                                                                                                  : branch to return it.
                                          0047
                                          0047
                                          0047
                                          0047
                                                                        entry point to return all blb's, bdb's and buffers for this stream.
                                                           244
                                                                        status already pushed onto stack. this is error path from rm$bdballoc to return bdb's, blb's allocated before failure. irab will also be
                                          0047
                                          0047
                                                          tdtb - $ + + 2555 RM + + 2555 RM + + 2555 RM +
                                          0047
                                                                         deallocated before returning to user so no other structures can be present.
                                          0047
                                                                         this is strictly error path on connect operation. lock blb will not have
                                          0047
                                                                        been allocated.
                                          0047
                                          0047
                                          0047
                                          0047
                                                                    RM$COMCLNUP::
                                          0047
                                          0047
                                          0047
                                          0047
                                                                                      return bdb's used by this stream
                                          0047
                                          0047
                                          0047
                                                                                                         IRB$B_BCNT(R9)
CHKGBE
              54 A9
                                          0047
                                                           260
                                                                                       DECB
                                                                                                                                                                   ; decrement buffer count
                                 19
                     48
                                          004A
                                                           261
                                                                                       BLSS
                                                                                                                                                                  : branch if no more
                                                          262
                                                                    B10:
                                          004C
                                                                                       SCACHE
                                                                                                         VBN=#0,SIZE=#0,-
                                                                                                                                                                     get any BDB.
failed so go around again
                                          004C
                                                                                                          FLAGS=<NOREAD>
                                                          264 BLBC
265 RTNBDB: MOVL
266 BSBW
267 BLBS
             EE 50
                                          0056
                                                                                                          RO.RMSCOMCLNUP
                                DÓ
30
E8
          53
                                          0059
                                                                                                          #RLS$M_RETURN,R3
                                                                                                                                                                      set return flag
                FFA1'
                                                                                                          RM$RELEASE
                                                                                                                                                                      release bdb & Buffer
                                          005C
              03 50
                                          005F
                                                                                                          RO, RTNJNL
                                                                                                                                                                      go check for blh release
                                          0062
0065
                    50
                                                           268
         6E
                                 D0
                                                                                       MOVL
                                                                                                          RO,(SP)
                                                                                                                                                                   ; šave error code
00000000'EF
                                 16
                                          0065
                                                                    RTNJNL: JSB
                                                                                                          RM$DSCJNL
                                                                                                                                                                  ; clean up IRAB journal structures
                                                           271
                                          006B
                                          006B
                                          006B
                                                           274
275
                                                                    ; check for locking and return blb's if so.
                                          006B
                                          006B
                                                           276
277
                                          006B
                                          006B
```

278 RTNBLB:

006B

```
#IFB$V_NORECLK, (R10), RM$COMCLNUP; branch back if no locking.
RTNBLB5; Return a BLB.
RM$COMCLNUP; Loop to get any more.
                  E0
10
  D8 6A
                                279
280
281
282
RTNBLBS
283
284
285
286
287
10$:
288
299
291
292
293
20$:
295
297
CHKGBL:
298
299
300
10$:
301
302
303
                        006F
0071
            ŎŽ
                                                BSBB
                   11
                                                BRB
                        0073
                                      RTNBLBS:
                                                         BLB$L_FLNK EQ 0
BLB$L_BLNK EQ 4
IFB$L_BLBFLNK(R10), R4; get list head.
R4,R0; save for end to
4(R4), R4; get blb element
R0, R4; back at list ho
20$; it's a bug if the
                                                ASSUME
                                                ASSUME
      0098 CA
54
                        0073
                                                MOVAL
                   DE
      50
                   D0
                        0078
                                                MOVL
                                                                                         ; save for end test.
  54
         04 A4
                   D0
                        007B
                                                MOVL
                                                                                           get blb element.
            50
      54
                   D1
                        007F
                                                CMPL
                                                                                           Back at list head?
            09
                   13
                        0082
                                                BEQL
                                                                                         ; it's a bug if we are.
                   D5
12
31
                        0084
0087
                                                          BLBSL_LOCK_ID(R4)
                                                                                           is this one in use?
         24 A4
                                                TSTL
                                                          10$
                                                                                          NEQ it is, get another.
                                                BNEQ
          FF74
                        0089
                                                          RM$RETBLB
                                                BRW
                                                                                          and return it.
                   ÕŠ
                        008C
                                                RSB
                                                                                         : Return.
                        008D
                        008D
                                                RMSPBUG FTL$_NOBLB
                        0094
                        0094
  27 69
            36
                   E1
                        0094
                                                BBC
                                                          #IRB$V_GBLBUFF, (R9), RTNRLB
                                                                                                   ; Branch if no gbpb, blb allocated.
                                                                                                   ; Init pass counter.
             7E
                   D4
                        0098
                                                CLRL
                                                          -(SP)
        40 AA
                                                          IFB$L_BDB_FLNK(R10),R4
                                                                                                   ; Get list head address.
                   DE
                        009A
                                                MOVAL
      50
                   DO
                        009E
                                                MOVL
                                                          R4, R0
                                                                                                   : Save for end test.
                        00A1
                        00A1
                                                ASSUME
                                                                                         <IFB$L_BDB_FLNK + 4>
                                                         IFB$L_BDB_BLNK EQ
                        00A1
                                                ASSUME GBPB$E_BLINK
                        00A1
                                 306 20$:
307
308
                                                                                         ; Scan backwards.
        04 A4
0 54
                                                          4(R4), R4
R4, R0
30$
                                                MOVL
                   DO
                        00A1
      50
                                                                                         ; Back at head?
                                                CMPL
                   D1
                        00A5
            12
                   13
                        8A00
                                                BEQL
                                                                                         ; Continue if so.
                                                         <GBPB$C_BID & 1> EQ 1
GBPB$R_BID(R4), 20$
GBPB$W_USERS(R4)
                                 309
                                                ASSUME
                        00AA
    F3 08 A4
                   E9
                        00AA
                                 <u>3</u>10
                                                BLBC
                                                                                         ; Keep looking if not GBPB.
                                 311
312
313
         OC A4
                  B5
                        OOAE
                                                TSTW
                                                                                          Is use count zero?
            EE
                        00B1
                                                BNEQ
                                                          20$
                                                                                          Keep looking if not.
                   30
                                                          RMSRETGBPB
          FF4A
                        00B3
                                                BSBW
                                                                                          Return the GBPB.
                   10
                                 314
            BB
                        00B6
                                                BSBB
                                                          RTNBLBS
                                                                                          Return the BLB.
                  E3
                                                          #0, (SP), 10$
#4, SP
            00
                                 315
                        00B8
                                                                                          Branch if 1st pass.
  DE 6E
                                                BBCS
                                 316 30$:
      5E
            04
                   CO
                        00BC
                                                ADDL2
                                                                                         ; Remove pass counter.
                                 317
                        00BF
                                 318 ;++
                        00BF
                                00BF
                        00BF
                                        unlock all locked records for this stream and deallocate all unused rlb's
                        00BF
                        00BF
                        00BF
         FF3E'
                        00BF
                                                          RM$UNLOCKALL
53
            38
53
                   C1
                        0002
                                                ADDL3
                                                          #IRB$L_RLB_LNK,R9,R3
                                                                                        ; get rlb list head addr in r3
                   D0
                        0006
                                                          R3,AP
                                                                                         ; copy it
                                                          RLBSL LNK EQ 0 (AP),R4
                                                ASSUME
                        0009
                   D0
                        0009
      54
            60
                                                                                          get next rlb addr
                   13
             19
                        0000
                                                          60$
                                                                                          branch if no more
                                                          RLB$L_OWNER(R4)
         10 A4
                   D5
                        00CE
                                                                                          in use?
                                                                                         ; branch if yes
                   12
             0F
                        00D1
                                                          RLB$L_LNK(R4),(AP)
#RLB$C_BLN,R2
                   DO
                        00D3
                                                                                         ; remove rlb from chain
            64
            10
                                                                                         ; set rib length
                   D0
                        0006
                   DD
                        00D9
                                                PUSHL
                                                                                         ; save space header addr
          FF22
                   30
                        OODB
                                                          RMSRETSPC1
                                                                                         : deallocate rlb
```

K 2 COMMON CLEAN UP CONN-DISCONN 16-SEP-1984 00:14:09 VAX/VMS Macro V04-00 RM\$DISCOMMON - COMMON CLEANUP ON CONNECT 5-SEP-1984 16:21:29 [RMS.SRC]RMOCOMCLN.MAR;1 Page 9 (5) 336 337 338 55\$: 339 340 60\$: #^M<R3> 40\$ R4\_AP 40\$ 00DE 00E0 00E2 00E5 00E7 BA 11 DO 11

11

5 C

POPR BRB MOVL BRB BRB

RTNIRB

; restore space header addr
; go get next rlb
; rlb in use - copy addr
; go get next rlb

RF

۷(

```
COMMON CLEAN UP CONN-DISCONN 16-SEP-1984 00:14:09 VAX/VMS Macro V04-00 RM$DISCOMMON - COMMON CLEANUP ON CONNECT 5-SEP-1984 16:21:29 [RMS.SRC]RMOCOMCLN.MAR;1
                                                                                                                                                           Page 10 (7)
                             342
343 :++
345 : this is
346 : just ze
349 :--
350 IND_FILE:
352
353 BB
                   00E9
00E9
00E9
                                         this is a disconnect of an indirectly connected irab (i.e., for the image)
                                    just zero isi and clear eof if unit record device
                   00E9
                                                             RAB$W_ISI(R8) ; clear isi
#DEV$V_REC,-
IFB$L_PRIM_DEV(R10),EXIT; branch if not unit record device
#IRB$V_EOF,(R9) ; reset eof flag
02 A8
00
                   00E9
                                                 CLRW
            Ē1
                   OOEC
                                                 BBC
41 6A
                   ÖÖĒĒ
                   00F0
                                                 CSB
     38
             11
                   00F4
                                                 BRB
                                                              EXIT
```

R

٧(

Page 11 (9)

	00F6 00F6 00F6 00F6 00F6 00F6	358 360; 361: entry point for when no bdb's or buffers allocated. 362: simply deallocate the irab and zeroes isi. 363: 364: 365 366 RM\$CCLN1::
50	00F6 DD 00F6 00F8	367 PUSHL RO ; save error code ; find this irab in irac chain
53 5A	00F8 00F8 00FB	369 370 RTNIRB: MOVL R10,R3 ; get ifab addr 371 ASSUME IRB\$! IRAB_LNK EQ IFB\$L_IRAB_LNK 372 10\$: MOVL IRB\$L_IRAB_LNK(R3),R6 ; get next irab
56 1C A3 59 56 05 53 56 F2	DO 00FB D1 00FF 13 0102 D0 0104 11 0107 0109	ASSUME IRBS! IRAB_LNK EQ IFB\$L_IRAB_LNK 372 10\$: MOVL IRP\$L_IRAB_LNK(R3),R6 ; get next irab ; is this the one? ; is this the one? ; b anch if yes ; move ptr to other reg ; % keep searching 377 378;
1C A3 1C A6	0109 0109 0109 0109 DO 0109 010E 010E	379 : got the irab - close up chain and deallocate the irab 380 : 381 382 20\$: MOVL IRB\$L_IRAB_LNK(R6),IRB\$L_IRAB_LNK(R3) 383 384 : 385 : restore the user's mode and arg list pointer from the irab before
57 OA A9 50 18 A9	010E 010E 010E 9A 010E D0 0112 0116 0116 0116	386 deallocating it. 387  388  389
53 5A 54 14 A9 06 FEDE' 53 5A 54 59 FEDS' 51 1C AB 07 01	0116 D0 0116 D0 0119 13 011D 30 011F D0 0122 D0 0125 30 0128 D0 0128 D0 012F BA 0131 05 0133	395 396 MOVL R10,R3 397 MOVL IRB\$L_ASBADDR(R9),R4 398 BEQL 30\$ 399 BSBW RM\$RFTBLK 400 MOVL R10,R3 401 30\$: MOVL R9,R4 402 BSBW RM\$RETBLK 403 MOVL IMP\$L IRABTBL(R11),R1 404 BSBB ZAPCOM 405 EXIT: POPR #^M <r0> 406 RSB  397 get space header page 398 ; get asb addr 30\$ ; deallocate irab 398 ; restore header page 399 get irab addr 30\$ ; deallocate irab 30\$ ; deallocate irab 30\$ ; deallocate irab 30\$ ; get irab table addr 30\$ ; restore status 399 ; restore status 399 ; return</r0>

```
408
409
410
                    411
                                     subroutine to clear the ifab or irab table
                                     entry for the ifab or irab whose address is in r9.
                                     also zeros the ifi or isi and r9
                             415
                                     inputs:
                             416
                                            r11
                                                       impure area address
                                            r9
                                                      ifab/irab uddress
                                            r8
                             418
                                                      fab/rab address
                             419
                             4201
4223
4224
4225
4227
                                     outputs:
                                            ifab/irab table pointer zeroed.
                                            ifab/irab address in r9 zeroed.
                                            fab$w_ifi/rab$w_isi zeroed
                                            r0-r2 destroyed
                     0134
                     0134
                             428 RM$ZAPIFI::
                             428 RM$ZAPIN
429
430 ZAPCOM:
431
432
433
434
435 10$:
436
437
438
439
440
51
     18 AB
                                            MOVAL
                                                      IMP$L_IFABTBL(R11),R1 ; get ifab table addr
                     0138
                     0138
                                                      4(R1),R2
52
      04 A1
                DE
                                            MOVAL
                                                                                    ; leave r1 pointing to link
                    013C
                                                                                    ; point r2 to 1st entry
                     013C
     20 AB
82
                    013C
                                                      IMP$W_ENTPERSEG(R11),R0 ; # entries per table segment.
(R2)+,F9 ; is this desired entry?
                                            MOVZWL
                    0140
0143
   59
                D1
                                             CMPL
                13
          80
                                            BEQL
                                                      20$
                                                                                      branch if yes
                                                      RO, 10$ (R1), R1
               F.S
                    0145
     F8
         50
                                            SOBGTR
                                                                                    ; keep trying
   51
               DÕ
                     0148
         61
                                            MOVL
                                                                                    ; next segment
                11
          EB.
                    014B
                                            BRB
                                                      ZAPCÓM
                     014D
                             441 :
442 : th
443 :
444 20$:
                     014D
                     014D
                                  ; this is the sought-for table entry - zero it
                     014D
                    014D
         72
                    014D
                                                      -(R2)
               D4
                                            CLRL
                                                      RAB$W_ISI EQ FAB$W_IFI
RAB$W_ISI(R8)
                     014F
                             446
                                            ASSUME
     02 A8
22 AB
59
                             447
               84
B/
                     014F
                                            CLRW
                                                                                    ; zero isi (or ifi)
                             448
449
450
451
452
                    0152
0155
0157
                                                      IMP$W_NUM_IFABS(R11)
                                                                                    ; decrement count of allocated ifabs
                                            DECW
               D4
05
                                            CLRL
                                                                                    : zero ifab or irab address
                                            RSB
                     0158
                     0158
                                             .END
```

Page

 $(1\overline{1})$ 

CONN	8	3	16-SEP-1984 5-SEP-1984	00:14: 16:21:	:09 V	/AX/\ RMS.	/MS Mad .SRC]RI	cro VO4-00 MOCOMCLN.MA	R,1
RLB\$L RLB\$L RLB\$L RLB\$L RM\$CCOMS RM\$	HE N1 CLNI COMM JNL EASE BLK BBLK GBPC1 IFI	JP 10N 10NSU(			00000 00000 00000 00000 00000 00000 0000	0010 0001 0001 0000 0000 0000 0000 000		01 01 01 01 01 01 01 01 01 01 01 01 01 0	

16-SEP-1984 00:14:09 VAX/VMS Macro V04-00 Page 5-SEP-1984 16:21:29 [RMS.SRC]RMOCOMCLN.MAR;1

Page 14 (11)

VQ

Psect synopsis !

PSECT name PSECT No. Attributes Allocation 00000000 00 ( 0.) ABS NOWRT NOVEC BYTE 0.) NOPIC ABS USR CON LCL NOSHR NOEXE NORD RM\$RMSO 00000158 344.) 01 ( 1.) PIC USR CON REL GBL NOSHR EXE RD NOWRT NOVEC BYTE SABSS 02 ( 2.) 00000000 0.) NOPIC USR CON ABS LCL NOSHR EXE RD WRT NOVEC BYTE

Performance indicators !

Phase	Page faults	CPU Time	Elapse' Time
Initialization	29	00:00:00.07	00:00:00.89
Command processing	114	00:00:00.71	00:00:05.02
Pass 1	347	00:00:11.72	00:00:35.48
Symbol table sort	0	00:00:01.53	00:00:02.32
Pass 2	93 11	00:00:02.35	00:00:05.38
Symbol table output	11	00:00:00.13	00:00:01.72
Psect synopsis output	2	00:00:00.03	00:00:00.16
Cross-reference output	Ō	00:00:00.00	00:00:00.00
Assembler run totals	59 <b>8</b>	00:00:16.56	00:00:50.98

The working set limit was 1650 pages.
65097 bytes (128 pages) of virtual memory were used to buffer the intermediate code.
There were 60 pages of symbol table space allocated to hold 1211 non-local and 16 local symbols.
452 source lines were read in Pass 1, producing 14 object records in Pass 2.
31 pages of virtual memory were used to define 30 macros.

! Macro library statistics !

Macro Library name

\$255\$DUA28:[RMS.OBJ]RMS.MLB;1

\$255\$DUA28:[SYS.OBJ]LIB.MLB;1

\$255\$DUA28:[SYSLIB]STARLET.MLB;2

TOTALS (all Libraries)

Macros defined

19

6

26

1366 GETS were required to define 26 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LISS:RMOCOMCLN/OBJ=OBJS:RMOCOMCLN MSRCS:RMOCOMCLN/UPDATE=(ENHS:RMOCOMCLN)+EXECMLS/LIB+LIBS:RMS/LIB

0318 AH-BT13A-SE

## DIGITAL EQUIPMENT CORPORATION CONFIDENTIAL AND PROPRIETARY

